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### IN THE CLAIMS

Please add new Claim 36 and amend Claim 1 as follows:

1. (Currently Amended) A method of making a ester comprising:
- (a) contacting an olefin or ether with carbon monoxide and an acid composition comprising  $\text{BF}_3 \cdot 2\text{ROH}$  to form a product composition;
  - (b) adding ROH to the product composition of (a); and
  - (c) separating an acid product comprising  $\text{BF}_3 \cdot 2\text{ROH}$  from the ester, wherein ROH is selected from methanol; n-propanol; n-butanol; 2-ethyl hexanol; isohexanol; isohexanol; isooctanol; isononanol; 3,5,5-trimethyl hexanol; isodecanol; isotridecanol; 1-octanol; 1-decanol; 1-dodecanol; 1-tetradecanol and mixtures thereof.
2. (original) The method of claim 1 further comprising:
- (d) recycling a portion of the separated acid product to contact the olefin or ether.
3. (original) The method of claim 1 wherein the olefin is selected from the group consisting of ethylene, propylene, isoolefins, normal butenes, and  $\text{C}_5$  to  $\text{C}_{18}$  olefins.
4. (original) The method of claim 2 wherein the olefin is isobutene.
5. (original) The method of claim 1 wherein the ether is represented by the general formula  $\text{R}'\text{-O-R}''$ , wherein  $\text{R}'$  = saturated  $\text{C}_1$  -  $\text{C}_{13}$  alkyl and  $\text{R}''$  = saturated  $\text{C}_1$  -  $\text{C}_{13}$  alkyl, and  $\text{R}'$  and  $\text{R}''$  can be the same or different.
6. (original) The method of claim 5 wherein the ether is methyl-t-butylether.

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7. (original) The method of claim 1 wherein contacting the olefin or ether comprises contacting at a temperature from about 60°C to about 200°C.

8. (original) The method of claim 7 wherein contacting the olefin or ether comprises contacting at a temperature from about 110°C to about 160°C.

9. (original) The method of claim 1 wherein contacting the olefin or ether comprises contacting at a pressure from about 30 atm to about 200 atm.

10. (original) The method of claim 9 wherein contacting the olefin or ether comprises contacting at a pressure from about 110 atm to about 160 atm.

11. (original) The method of claim 1 wherein ROH is an alcohol selected from the group consisting of methanol, n-propanol, n-butanol, 2-propanol, 2-ethyl hexanol, isohexanol, isoheptanol, isooctanol, isononanol, 3,5,5-trimethyl hexanol, isodecanol, isotridecanol, 1-octanol, 1-decanol, 1-dodecanol, and 1-tetradecanol.

12. (original) The method of claim 1 wherein ROH is methanol.

13. (original) The method of claim 1 wherein the ether is methyl-t-butyl ether.

14. (original) The method of claim 1 wherein the ether is diisopropyl ether and ROH is 2-propanol.

15. (original) The method of claim 1 further comprising:

(d) contacting the olefin or ether with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.

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16. (original) The method of claim 1 further comprising:  
(d) adding a hydrocarbon to the product composition of (a), wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.
17. (original) The method of claim 16 further comprising:  
(e) separating the hydrocarbon and ROH from  $\text{BF}_3 \cdot 2\text{ROH}$  and directing a portion of the separated hydrocarbon and the separated ROH to a unit selected from the group consisting of a separation unit, a reaction unit, and a combination thereof.
18. (original) The method of claim 1 further comprising:  
(d) contacting the olefin or ether with phosphoric acid.
19. (original) The method of claim 1 wherein separating the acid product comprises concentrating the acid product such that the molar ratio ROH: $\text{BF}_3$  in the concentrated acid product is from about 2:1 to about 4:1.
20. (original) The method of claim 19 wherein the concentrated acid product comprises a molar ratio of ROH: $\text{BF}_3$  from about 2:1 to about 3:1.
21. (original) The method of claim 1 wherein the acid composition comprises a molar ratio of ROH: $\text{BF}_3$  from about 1.6:1 to about 3:1.
22. (original) The method of claim 21 wherein the acid composition comprises a molar ratio of ROH: $\text{BF}_3$  from about 1.9:1 to about 3:1.
23. (original) The method of claim 1 where the product composition contains less than 3% by weight carboxylic acid.

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24. (original) A method of making methyl pivalate comprising:  
contacting methyl-t-butylether with carbon monoxide and an acid composition comprising  $\text{BF}_3 \cdot 2\text{CH}_3\text{OH}$  to form a product composition comprising methyl pivalate;  
adding methanol to the product composition; and  
separating an acid product comprising  $\text{BF}_3 \cdot 2\text{CH}_3\text{OH}$  from the methyl pivalate.

25. (original) The method of claim 24 wherein contacting methyl-t-butylether comprises contacting at a temperature of about  $110^\circ\text{C}$  to about  $160^\circ\text{C}$ .

26. (original) The method of claim 24 wherein contacting methyl-t-butylether comprises contacting at a pressure from about 30 atm to about 200 atm.

27. (original) The method of claim 24 further comprising contacting the methyl-t-butylether with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.

28. (original) The method of claim 24 further comprising contacting the product composition with a hydrocarbon, wherein the hydrocarbon is selected from a saturated linear or branched hydrocarbon having at least six carbons.

29. (original) The method of claim 28 further comprising separating the hydrocarbon and the methanol from the methyl pivalate and directing a portion of the separated hydrocarbon and the separated methanol to a unit selected from the group consisting of a separation unit, a reaction unit, and a combination thereof.

30. (original) The method of claim 24 further comprising contacting the methyl-t-butylether with phosphoric acid.

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31. (original) The method of claim 24 wherein separating the acid product comprises concentrating the acid product such that the molar ratio ROH:BF<sub>3</sub> in the acid product is from about 2:1 to about 4:1.

32. (original) The method of claim 31 wherein the concentrated acid product comprises a molar ratio of ROH:BF<sub>3</sub> from about 2:1 to about 3:1.

33. (original) The method of claim 24 wherein the acid composition comprises a molar ratio of ROH:BF<sub>3</sub> from about 1.6:1 to about 3:1.

34. (original) The method of claim 33 wherein the acid composition comprises a molar ratio of ROH:BF<sub>3</sub> from about 1.9:1 to about 3:1.

35. (original) The method of claim 24 wherein the product composition contains nonanoic methyl esters such that the molar ratio of methyl pivalate to nonanoic methyl esters is about 4 or greater.

Please add new Claim 36.

36. (New) A method of making a ester comprising:

- (a) contacting an olefin or ether with carbon monoxide and an acid composition comprising BF<sub>3</sub> ROH to form a product composition;
- (b) adding ROH to the product composition of (a); and
- (c) separating an acid product comprising BF<sub>3</sub>·ROH from the ester, wherein ROH is selected from methanol; n-propanol; n-butanol; 2-ethyl hexanol; isohexanol; isohexanol; isooctanol; isononanol; 3,5,5-trimethyl hexanol; isodecanol; isotridecanol; 1-octanol; 1-decanol; 1-dodecanol; 1-tetradecanol and mixtures thereof and wherein the molar equivalents of ROH in the BF<sub>3</sub>·ROH ranges from about 2 to about 4.